

## Editorial

This special issue collects the short papers, mini reviews and technical notes that have been prepared based on the results of the project implementation: "The centre of excellence for utilization of information on bio-macromolecules in disease prevention and in improvement of quality of life" (ITMS 26240120003) supported by the Research and Development Operational Programme funded by the ERDF. The headquarter of this project is in the Faculty of Natural Sciences of the Comenius University in Bratislava (project co-ordinator Prof. M. Kollárová). The project has been started in 2009 and involved research groups also from other faculties of the Comenius University (Faculty of Mathematics, Physics and Informatics, Faculty of Pharmacy, Faculty of Medicine) and from the Slovak Academy of Sciences (Institute of Molecular Biology, Institute of Virology). The main purpose of the project is establishment of the network of laboratories well equipped with modern scientific instruments for interdisciplinary oriented research focused particularly on nanomedicine and nanotherapy. Thanks to substantial financial support from the European Union (ERDF Programme) the laboratories have been equipped in a relatively short time since the mid of 2010 with powerful scientific instruments such as Zeta Sizer Nano (Malvern, UK) for characterization of physical properties of nanoparticles, HPLC (Schimadzu, Japan) for precise biochemical analysis of samples, Confocal laser scanning microscope (LSM 510 Meta mounted on Axiovert 200M, Zeiss, Germany), flow cytometer (Guava EasyCyte-6HT, USA) for study of the transport of nanoparticles into the cells and other instruments for modern biomedical research. The first results obtained by these instruments together with description of technical capabilities of other techniques including short current start of the art in the drug delivery, electroporation and other hot topics are presented in this special issue. We believe that the presented contributions will be of interest of a broad research community that is interested in application of new ideas and methods in medicine, molecular biology and biophysics.

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